



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 6984/1

File Number: DER2016/000410-1

Duration of Permit: 8 July 2016 to 8 July 2018

PERMIT HOLDER

Dr Mark Lee

LAND ON WHICH CLEARING IS TO BE DONE

Lot 427 on Deposited Plan 230727, Shadforth

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 6.218 hectares of native vegetation within the area cross-hatched yellow on attached Plan 6984/1.

CONDITIONS

1. Weed Control

When undertaking any clearing authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared;
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared; and
- (d) only move soils in *dry conditions*.

DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

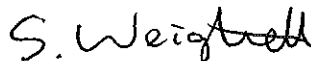
dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation; and

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Simon Weighell

A/SENIOR MANAGER CLEARING REGULATION

Officer delegated under section 20 of the *Environmental Protection Act 1986*

8 June 2016

Plan 6984/1

34.950505°S

34.950505°S

117.289361°E

117.311253°E



117.289361°E

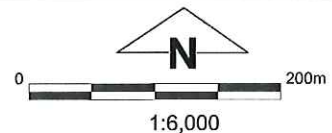
117.311253°E

34.965278°S

34.965278°S

Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

S. Weighell Date *8/6/16*
Simon Weighell

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA
WA Crown Copyright 2016



1. Application details

1.1. Permit application details

Permit application No.: 6984/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Dr Mark Andrew Lee

1.3. Property details

Property: Lot 427 on Deposited Plan 230727, Shadforth
Local Government Authority: Denmark, Shire Of
DER Region: South Coast
DPaW District: Frankland
Localities: Shadforth

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6.218		Mechanical Removal	Weed removal and fire hazard reduction

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 8 June 2016

Reasons for Decision: The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and has concluded that the proposed clearing may be at variance to Principle (c), and is not likely to be at variance to any of the remaining Principles.

An assessment has determined that the application area may contain habitat for one rare flora species, however these impacts are not likely to impact the conservation of this species.

The Delegated Officer considered that the implementation of suitable weed and dieback management measures was appropriate to address the impacts of the proposed clearing.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Two Beard vegetation associations are mapped over the application area:	The applicant proposes to clear up to 6.218 hectares of native vegetation for the purpose of weed removal and fire risk reduction.	Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).	The vegetation condition was determined during a site inspection (DER, 2016).
Beard vegetation association 1 is described as tall forest; karri (<i>Eucalyptus diversicolor</i>); and			A site inspection found that blackberry (<i>Rubus fruticosus</i> aggregate; weed of national significance) was present across the remnant within which the application area is located, with the highest densities occurring around the edge of the remnant and decreasing towards the centre of the remnant (DER, 2016). DER officers did not detect blackberry in the centre of the remnant (DER, 2016).
Beard vegetation 969 is described as: mosaic of medium forest; jarrah-marri/ low forest; jarrah (Shepherd et al., 2001).			
A site inspection conducted by the Department of Environment Regulation (DER) on 27 April 2016 found vegetation within the application area to be representative of Beard vegetation association 1.			

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposed clearing is not likely to be at variance to this Principle

The clearing of 6.218 hectares of native vegetation within Lot 427 on Deposited Plan 230727, Shadforth, is for the purpose of weed control and fire risk reduction. Vegetation within the application area is in a very good (Keighery, 1994) condition (DER, 2016). The surrounding area is used for agricultural activities.

Approximately 45 per cent native vegetation remains within the local area (defined as a 10 kilometre radius around the application area). The application area is part of an overall remnant of native vegetation of approximately 17.5 hectares in total area. It is located within 150 metres of five other remnants that range from 0.4 to nine hectares in size, with the closest remnant of comparable size located approximately 300 metres from the application area. The proposed clearing will reduce the extent of the overall remnant in which it is located, increasing the risk of edge effects. While the proposed clearing may impact the biodiversity values of the remnant, the local area has not been extensively cleared and the proposed clearing is not likely to impact the level of biodiversity in the local area.

The application area is within 'Zone A' of a macro habitat corridor defined in the Western Australian South Coast Macro Corridor Network (Wilkins et al., 2006). Vegetation within Zone A "form the most strategic link between major protected areas" (Wilkins et al., 2006). While the application area is located within Zone A of the Macro Corridor, based on a review of aerial imagery it does not form a significant linkage between remnants of native vegetation and does not provide a direct linkage to any conservation areas.

A total of five rare and 30 priority flora (three priority 1, four priority 2, seven priority 3 and 16 priority 4) have been recorded within 10 kilometres of the application area. Priority 3 flora species are poorly known, but do not appear to be under imminent threat. Priority 4 flora species are either rare, near threatened or in need of further monitoring. The proposed clearing is unlikely to impact the conservation of any priority 3 or priority 4 species if present within the application area. Based on the habitat present within the application area, one rare flora may occur within the application area. However, the Department of Parks and Wildlife (Parks and Wildlife) advised that the proposed clearing will not impact the conservation of this species, even if it is present within the application area (Parks and Wildlife, 2016).

A total of 17 threatened and five priority fauna have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). Of these, four threatened and two priority fauna have the potential to utilise habitat within the application area, being:

- noisy scrub-bird (*Atrichornis clamosus*; rare or likely to become extinct under the *Wildlife Conservation Act 1950* [WC Act]),
- WA pill millipede (*Cynotelopus notabilis*; rare or likely to become extinct under the WC Act),
- western ringtail possum (*Pseudocheirus occidentalis*; rare or likely to become extinct under the WC Act),
- western archaeid spider (*Zephyrarchaea mainae*; rare or likely to become extinct under the WC Act),
- short-nosed snake (*Elapognathus minor*, priority 2), and
- quenda (*Isoodon obesulus* subsp. *fusciventer*, priority 4).

Given the availability of similar vegetation types in the local area, the application area is not likely to provide significant habitat for any of the above fauna species. The application area is not likely to comprise a high level of faunal diversity on a local scale.

The application area and adjacent native vegetation within the remnant contains blackberry, a weed of national significance. Weed species can decrease the biodiversity value of an area, as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (DEC, 2011). Potential impacts to biodiversity within and nearby the application area as a result of the proposed clearing may be minimised by the implementation of weed management practices.

No threatened or priority ecological communities (TEC or PEC) have been recorded within 10 kilometres of the application area. The proposed clearing is not likely to impact a TEC or PEC.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

References:

DEC (2011)
DER (2016)
Keighery et al. (1994)
Parks and Wildlife (2007-)
Parks and Wildlife (2016)
Wilkins et al. (2006)

GIS Databases:

- Imagery
- Remnant vegetation
- Parks and Wildlife tenure
- SAC bio datasets (Accessed June 2016)

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposed clearing is not likely to be at variance to this Principle

The application area comprises 6.218 hectares of a larger remnant approximately 17.5 hectares in size. The remnant is surrounded by areas cleared for agricultural activity, which has fragmented the remaining native vegetation within the local area (10 kilometre radius). The application area contains vegetation in very good (Keighery, 1994) condition (DER, 2016), despite the presence of blackberry (weed of national significance).

The application area is located within the centre of the 17.5 hectare remnant. The proposed clearing will increase exposure of the surrounding native vegetation within the remnant to edge effects and is likely to reduce the remnant's value as fauna habitat.

The application area is within 'Zone A' of a macro habitat corridor defined in the Western Australian South Coast Macro Corridor Network (Wilkins et al., 2006). Vegetation within Zone A "form the most strategic link between major protected areas" (Wilkins et al., 2006). However, based on a review of aerial imagery the application area does not form a significant linkage between remnants of native vegetation and does not provide a direct linkage to any conservation areas.

A total of four threatened and two priority species may utilise habitat within the application area, including the noisy scrub-bird, WA pill millipede, western ringtail possum, western archaetid spider, short-nosed snake and quenda.

Approximately 45 per cent of pre-European native vegetation remains within 10 kilometres of the application area, of which 31 per cent contains similar habitat to that within the application area. Based on habitat availability within the surrounding area, the application area is not likely to provide significant habitat for the above fauna species.

The western quoll (chuditch, *Dasyurus geoffroyi*; rare or likely to become extinct under the WC Act) has been recorded within 10 kilometres of the application area, however according to available information it has not been recorded within pure karri forest (DotE, 2016).

All three species of black cockatoo (forest red-tailed black cockatoo, *Calyptorhynchus banksii* subsp. *naso*; Baudin's cockatoo, *Calyptorhynchus baudinii*; Carnaby's cockatoo, *Calyptorhynchus latirostris*; all rare or likely to become extinct under the WC Act) have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). The vegetation within the application area does not contain significant black cockatoo nesting or foraging habitat, and they are not likely to be dependent on the application area for roosting habitat.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

References:

DER (2016)
DotE (2016)
Keighery (1994)
Parks and Wildlife (2007-)
Wilkins et al. (2006)

GIS Databases:

- Parks and Wildlife tenure
- Pre-European vegetation
- Remnant vegetation

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposed clearing may be at variance to this Principle

Based on the habitat type present within the application area, one species of rare flora has the potential to occur within the application area. However, Parks and Wildlife (2016) advised that south-western records of this species are now considered to be a naturalised weedy form of the eastern species, and the proposed clearing will not impact the conservation of this species even if it is present within the application area.

The application area may contain rare flora and therefore the proposed clearing may be at variance to this Principle.

Methodology

References:

Parks and Wildlife (2016)
GIS Databases:
- SAC bio datasets (Accessed June 2016)

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposed clearing is not likely to be at variance to this Principle**
 According to available databases, no threatened ecological communities (TECs) have been recorded within the local area (10 kilometre radius). The vegetation under application is unlikely to represent a TEC listed under the WC Act or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
 - SAC bio datasets (Accessed June 2016)

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposed clearing is not likely to be at variance to this Principle**
 The application area is part of a remnant of native vegetation of approximately 17.5 hectares in total area. The application area is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion which retains approximately 79 per cent of the pre-European vegetation extent (Government of Western Australia, 2014). The local government area within which the application area is located retains approximately 75 per cent pre-European vegetation extent. The vegetation associations mapped within the application area retain approximately 78 and 40 per cent of the pre-European extent within the IBRA bioregion (Government of Western Australia, 2014). The vegetation within the application area represents Beard vegetation 1 (karri forest), of which approximately 78 per cent remains within the IBRA bioregion.

According to available databases, the local area (10 kilometre radius) retains approximately 45 per cent of the pre-European vegetation extent.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). None of the vegetation extents within the IBRA bioregion, local government area or application area are below the 30 per cent threshold.

The application area is within 'Zone A' of a macro habitat corridor defined in the Western Australian South Coast Macro Corridor Network (Wilkins et al., 2006).

Given the application area is not located within a highly cleared area, the proposed clearing is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*: Warren	833,985.55	660,315.14	79.18	84.60
Shire*: Denmark, Shire Of	190,533.84	142,246.20	74.66	79.30
Beard Vegetation Association In Bioregion*				
1	69,118.21	53,821.56	77.87	83.87
969	19,159.43	7,600.42	39.67	9.47

Methodology References:
 Commonwealth of Australia (2001)
 *Government of Western Australia (2014)
 Wilkins et al. (2006)

GIS Databases:
 - Remnant vegetation
 - SAC bio datasets (Accessed June 2016)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposed clearing is not likely to be at variance to this Principle**
 There are no wetlands or watercourses within the application area (DER, 2016). The nearest wetland or watercourse is the Little River, which is located approximately 2.6 kilometres from the application area.

The vegetation under application is not considered likely to be growing in association with a watercourse or wetland.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
DER (2016)

GIS Databases:
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposed clearing is not likely to be at variance to this Principle**

The soil type mapped within the application area is described as plains with a succession of swampy flats broken by low sandy or ironstone gravelly knolls and hillock, with chief soils of leached sands, some of which have a thin peaty surface horizon (Northcote et al., 1960-68). The application area is located within a valley with a slope of 150 to 120 metres above sea level that drains to a dam located 450 metres north-east of the application area.

Broad scale mapping undertaken by the Department of Agriculture and Food Western Australia (DAFWA) indicates that soils within the application area have a low risk of land degradation via salinity, waterlogging and wind erosion, and a moderate risk of water erosion and nutrient export (DAFWA, 2016).

The application area is located in a valley that is likely to receive higher levels of rainfall runoff from surrounding areas, and drains in a north-easterly direction. The elevation of the application area is not representative of a low point in the landscape. The proposed clearing is not likely to cause appreciable land degradation via waterlogging.

The application area occurs on a slight slope, but is buffered from historically cleared areas by native vegetation that ranges from seven to 40 metres in width. Approximately 125 metres of the perimeter of the application area is not buffered by native vegetation. The retainment of native vegetation as a buffer around the majority of the application area is likely to mitigate land degradation via water erosion and nutrient export.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
DAFWA (2016)
Northcote et al. (1960-68)

GIS Database:
- Imagery
- Remnant vegetation
- Soils, statewide
- Topographic contours, statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposed clearing is not likely to be at variance to this Principle**

Nine conservation areas occur within 10 kilometres of the application area, with the nearest being the Mount Shadforth Nature Reserve reserve located approximately two kilometres south-west of the application area.

The application area is within 'Zone A' of a macro habitat corridor defined in the Western Australian South Coast Macro Corridor Network (Wilkins et al., 2006). Vegetation within Zone A "form the most strategic link between major protected areas" (Wilkins et al., 2006). Based on a review of aerial imagery the application area does not form a significant linkage between remnants of native vegetation and does not provide a direct linkage to any conservation areas.

The application area is part of a remnant of native vegetation of approximately 17.5 hectares in total area, and has no direct connection any conservation area. It is considered that the proposed clearing is unlikely to impact the environmental values of any nearby conservation area.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
Wilkins et al. (2006)

GIS Databases:
- Imagery
- Parks and Wildlife tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments Proposed clearing is not likely to be at variance to this Principle

There are no wetlands or watercourses mapped within the application area, and no obvious watercourses were observed during a site inspection (DER, 2016). The application area is up-slope of a dam located approximately 450 metres north-east of the application area, which occurs on a watercourse that is a tributary of Scotsdale Brook.

The Department of Water (DoW) advised that the application area is within the Wilson Inlet Catchment Area, which is a declared Waterways Management Area. Wilson Inlet is a significant waterway that is vulnerable to poor water quality as a result of runoff from the catchment area (DoW, 2016).

DoW (2016) advised that the proposed clearing may facilitate the mobilisation of sediment and nutrient export downstream, impacting the water quality of the Scotsdale Brook. Approximately 5.5 hectares of native vegetation remains immediately down-slope of the application area. It is considered that this vegetation will assist in preventing significant sediment and nutrient export downstream.

Groundwater salinity within the application area is mapped as 500-1000 total dissolved solids milligrams per litre, which is considered to be a marginal level of salinity. Mapping by DAFWA (2016) indicates that soils within the application area have a low risk of salinity.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
DAFWA (2016)
DER (2016)
DoW (2016)

GIS Database:
- Hydrography, linear
- Remnant vegetation
- Rivers
- Topographic contours, statewide

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposed clearing is not likely to be at variance to this Principle

There are no wetlands or watercourses within the application area (DER, 2016). The soil type mapped within the application area contains chief soils of leached sands, some of which have a thin peaty surface horizon (Northcote et al., 1960-68). The application area occurs within a minor valley that drains in a north-easterly direction towards a tributary of Scotsdale Brook. A remnant of approximately 5.5 hectares of native vegetation occurs directly downstream of the application area.

While the proposed clearing is likely to increase surface water runoff, an increase in the incidence or intensity of flooding is not likely to occur either within or downstream of the application area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
DER (2016)
Northcote et al. (1960-68)

GIS Database:
- Hydrography, linear
- Imagery
- Remnant vegetation
- Topographic contours, statewide

Planning instruments and other relevant matters.

Comments The applicant proposes to clear up to 6.218 hectares of native vegetation within Lot 427 on Deposited Plan 230727, Shadforth, for the purpose of weed control and fire risk reduction.

The applicant has proposed to clear vegetation as a means to control blackberry and sword grass, noting that the truffle farm adjacent to the application area will be sensitive to the spraying of herbicides. The applicant has committed to retaining all medium to large trees within the application area.

The Shire of Denmark (2016) advised that they do not support the proposed clearing for the following reasons:

- Sword grass (*Lepidosperma* spp.) is a local native species and not a weed;

- The vegetation is in good condition, with the Shire observing no obvious signs of blackberry infestation along the vegetation perimeter;
- Land clearing is not considered the most effective method of weed removal, and blackberry can be effectively controlled without the requirement to remove vegetation;
- Blackberry is likely to return after clearing if all root stock is not removed, which would require the removal of topsoil ;
- The absence of native species within the cleared area will allow rapid re-establishment of the weed;
- Herbicides are considered to be the most effective method of blackberry control. Given the distance from the remnant vegetation to the truffle-growing area on the property, the use of herbicides is not considered likely to impact the truffle farm;
- Manual removal by hand is recommended in lieu of herbicide use;
- Blackberry can also be introduced to the truffle-growing area by birds transferring seed from infestations in surrounding areas off-property;
- Under the Shire's Bushfire Notice, there is no requirement to clear native vegetation within the application area for bushfire hazard reduction, and this vegetation is not considered by the Shire to be 'high risk' in its current state;
- The proposed clearing will remove the core of a larger remnant, which will increase edge effects that will degrade the remaining native vegetation; and
- The applicant should submit a flora and weed report detailing the distribution and abundance of blackberries and assess its risk to other farming activities on the property.

A site inspection observed that areas with the highest level of blackberry infestation occurred at the edges of the remnant (DER, 2016), much of which is not included in the application area. Little to no blackberry infestation was observed in the centre of the remnant and application area (DER, 2016).

The environmental values of the vegetation and potential impacts of the proposed clearing have been considered in the above assessment. As no potential significant impacts have been identified, it has been determined that concerns relating to the purpose of the proposed clearing are not a key consideration.

The clearing permit application was advertised in *The West Australian* newspaper on 28 March 2016 for a 21 day comment period. No public submissions were received.

Methodology References:
 DER (2016)
 Shire of Denmark (2016)

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAFWA (2016) Natural Resource Management Shared Land Information Portal. Department of Agriculture and Food Western Australia. <http://maps.agric.wa.gov.au/nrminfo/> (Accessed June 2016).
- DEC (2011) Invasive Plant Prioritisation, Department of Environment and Conservation, Perth.
- DER (2016) CPS 6984/1 site inspection report. Department of Environment Regulation, Perth. DER REF: A1106439.
- DotE (2016) *Dasyurus geoffroii* in Species Profile and Threats Database, Department of the Environment, Canberra. url: <http://www.environment.gov.au/sprat>. Accessed June 2016.
- DoW (2016) Advice received from the Department of Water on 12 May 2016. DER REF: A1106434.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Parks and Wildlife (2007-) Naturemap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife, Perth. <http://naturemap.dpaw.wa.gov.au/default.aspx> (Accessed May 2016).
- Parks and Wildlife (2016) Flora advice received from the Department of Parks and Wildlife on 26 May 2016. DER REF: A1106436.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Shire of Denmark (2016) Advice received from the Shire of Denmark on 21 April 2016. DER REF: A1086623.
- Wilkins, P., Gilfillan, S., Watson, J. and Sanders, A. (ed) (2006) The Western Australian South Coast Macro Corridor Network – a bioregional strategy for nature conservation. Department of Conservation and Land Management (CALM) and South Coast Regional Initiative Planning Team (SCRIPT). Albany, Western Australia.